

ON A NEW SPECIES OF GENUS *ALLOTRISSOCLADIUS* FREEMAN  
(DIPTERA, CHIRONOMIDAE) FROM INDIA<sup>1</sup>

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(With three text-figures)

In course of our studies on the Chironomid midges of India, a few specimens of genus *Allotrissocladius* Freeman were noticed amongst collections of insects from Darjeeling, West Bengal, India. The insects at first sight seem to be members of the genus *Paratrissocladius* Zavrel but close examination of characters especially the presence of accessory appendages in male hypopygium, assigns them to the genus *Allotrissocladius*. The genus was first proposed by Freeman (1964) on the basis of specimens from Western Australia and *Allotrissocladius amphibius* Freeman was the type-species.

The descriptions and terminologies used in this paper have been followed after the works of Saether (1976).

*Allotrissocladius acutus* sp. nov.

*Male*: Body length 3.38 (3.34-3.39, n=6) mm; wing length 1.72 (1.68-1.74, n=6) mm; Wing breadth 0.53 (0.52-0.53, n=6) mm.

*Head*: Brown in colour. Vertex brown with 6-10 setae of which 2 being postocular on each side. Clypeus with 4 setae in transverse row. Maxillary palp light brown, palpomere III with a small preapical pit bearing 1-2 sensilla, palpomere V with an apical seta, ratio of length of palpomeres from I to V 8:13:32:26:45, L/W ratio 4.0. Eyes reniform, bare and slightly extended dorsally, extension being 0.1 mm. Antenna pale, flagellomeres cylin-

dricial, flagellomere XIII lance-shaped, ratio of length of flagellomeres from I to XIII 8:7:8:8:10:11:11:10:10:11:13:12:91, AR 0.76.

*Thorax*: Antepronotum with 1 lateral seta. Acrostichals 4-6 (6), dorsocentrals 10 in a row on each side, prealars 4, prescutellars 2 on each side. Scutellum with 4 setae on each side, postscutellum brown with dark margin.

*Wing* (Fig. 1): wing without macrotrichia, microtrichia visible in high magnification. Brachiolum with 1 seta, R with 14-15 (14) setae from the base, R<sub>1</sub> and R<sub>4+5</sub> with out setae; R<sub>2+3</sub> ends C at a distance of 0.19 mm from R<sub>1</sub>, R<sub>4+5</sub> ends slightly proximal to M<sub>3+4</sub>, C extended little beyond R<sub>4+5</sub> being 0.04 mm long, f-cu considerably distal to r-m, Cu<sub>1</sub> straight and slightly bent at the apex, ends slightly proximal to f-cu. Sensory organ I each r-m and at the base of R<sub>1</sub>. Squama with 12 setae. Anal lobe well developed and produced. Haltere pale. VR 1.1, CR 0.93.

*Legs*: uniformly brown. Spur of fore tibia 0.06 mm long, ratio of length of spur to the apical diameter of fore tibia 5:9; spurs of mid tibia equal 0.32 mm long, ratio of length of spur to the apical diameter of mid tibia 8:10; spurs of hind tibia unequal 0.076 mm and 0.032 mm long, ratio of length of spurs to the apical diameter of hind tibia 18:12, 8:12. Hind tibial comb with 12 setae, 0.028-0.056 mm long. Claws of hind leg equal, curved 0.028 mm long with 2 setae at the base. Empodium smaller than claws. LR 0.47 in fore leg, 0.56 in mid leg and 0.58 in hind leg. TR of hind leg 1.78.

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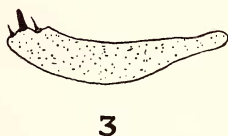
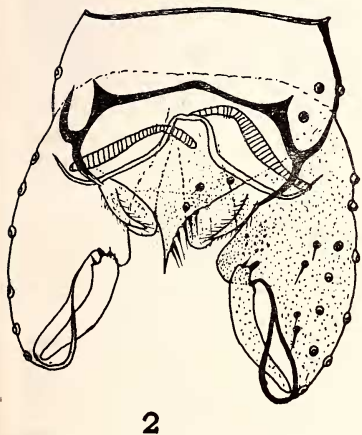
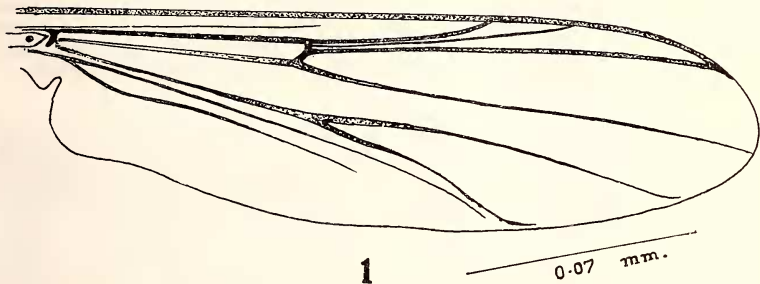
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NEW DESCRIPTIONS

*Abdomen:* Terga ochreous, tergum I with 15-16 lateral setae, terga II to VIII mottled brown with numerous setae. Hypopygium (Fig. 2). Anal point narrow and pointed bearing 5-6 (6) setae on each side. Gonocoxite with a thumb like basal lobe, gonocoxite with 24-26 setae; gonostylus (Fig. 3) slightly bent

at the middle, base narrow and distal part wider with an apical tooth 0.012 mm long and a seta on each side of tooth. Appendage two in number, outer one narrow, profusely setaceous and inner one broad. HR 2.2, HV 3.9.

*Material:* 6 males were collected by the senior author from the Govt. College, Dar-



Figs. 1-3. *Allotrissocladius acutus* sp. nov. 1. wing; 2. hypopygium and 3. gonostylus.

jeeling in May, 1970. Holotype male (Type no. 60, B.U .Ent.) in the collections of insects at the department of Zoology, University of Burdwan, Burdwan.

*Female*: unknown.

The present species has been named *Allo-trissocladius acutus* sp. nov. in view of its narrow and pointed anal point. The species shows close similarities with *A. amphibius* Freeman from West Australia in some aspects but the differences in the setae of thorax, wing with

its venation and structure of male hypopygium are sufficient to treat the species as a new one.

#### ACKNOWLEDGEMENTS

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### A NEW SPECIES OF THE GENUS *HERCULIA* WALKER FROM NORTH INDIA (LEPIDOPTERA: PYRALIDAE: PYRALINAE)<sup>1</sup>

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(With seven text-figures)

During an extensive survey of Pyralid moths of North India, we collected six species belonging to the subfamily Pyralinae. These six species included two new species, one of which has been already described (Rose and Pajni 1978). The second species, according to Hampson's key (1896), is clearly referable to the genus *Herculia* Walker, which includes fourteen other species from India. The species under reference is distinctly different from all other *Herculia* spp. (Hampson 1896a, 1896b, 1916, 1917) and hence, is being described as

a new species. The nomenclature of Klots (1970) has been followed for genitalic structures.

#### Genus *Herculia* Walker

*Herculia* Walker, 1859, *Cat. Lep. Het. Brit. Mus.*, 19: 807. Type species: *Herculia marthalis* Walker (Range: Universally distributed).

#### *Herculia hansii* sp. nov. (Figs. 1-7)

*Head*: Vertex covered with densely arranged long and ochreous scale; frons profusely scaled with ochreous brown scales. *Antenna*: shorter than fore wing; scape over laden with brown scales; flagellum annulated and finely ringed with fusco-rufous and pale brown scales; minutely pilose and without any bran-

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